

T-12014

T-12014

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline
Job No. PH-6013 Map No. T-12014
Classification No. Class III Edition No. ... 1
[Final] (Partial Field Edit)

LOCALITY

State Alaska
General Locality Cook Inlet
Locality Fire Island

1966 TO 1974

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Atlantic Marine Center, Norfolk, VA		SURVEY XXX T-12014 MAP EDITION NO. (1) MAP CLASS III (Final) JOB PH. 6013	
OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	

I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Compilation, Supplement 1	1/17/63	Field	6/6/66
Aerotriangulation ;	9/15/66	Field Supplement 1	8/8/66
Compilation, Supplement 3	4/26/67		
Compilation, Supplement 4	9/11/67		

II. DATUMS			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Polyconic		4. GRID(S) STATE Alaska ZONE 4	
5. SCALE 1:20,000		STATE ZONE	

III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS	NAME	DATE	
1. AEROTRIANGULATION BY L. Fritz		Feb 1963	
METHOD: Stereoplanigraph LANDMARKS AND AIDS BY			
2. CONTROL AND BRIDGE POINTS PLOTTED BY J. Harris		Feb 1963	
METHOD: Manual CHECKED BY C. Bishop		Feb 1963	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY L. Graves		Feb 1963	
COMPILATION CHECKED BY C. Bishop		Feb 1963	
INSTRUMENT: Kelsh Plotter	CONTOURS BY N.A.		
SCALE: 1:20,000	CHECKED BY N.A.		
4. MANUSCRIPT DELINEATION PLANIMETRY BY D. Williams		Feb 1963	
CHECKED BY Unknown			
METHOD: Smooth drafted	CONTOURS BY N.A.		
SCALE: 1:20,000	CHECKED BY N.A.		
HYDRO SUPPORT DATA BY D. Williams 2/63 - R. Pate		Apr 1967	
CHECKED BY R. Pate		Apr 1967	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY D. Williams		Feb 1973	
6. APPLICATION OF FIELD EDIT DATA BY F. Margiotta	Aug	1975 Feb 1973	
CHECKED BY J. D. Roderick		Feb 1977	
7. COMPILATION SECTION REVIEW BY A. C. Rauck, Jr.		Feb 1977	
8. FINAL REVIEW BY J. Byrd/C. Blood		May 1986	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY J. Byrd		Sept 1986	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY P. Dempsey		Oct. 1986	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY E. L. DAUGHERTY		Dec '86	

NOAA FORM 76-36B
(3-72)

T-12014

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S)

Wild RC-5 "W" and RC-8 "L"

TYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

TIDE STAGE REFERENCE

☒ PREDICTED TIDES☐ REFERENCE STATION RECORDS☐ TIDE CONTROLLED PHOTOGRAPHY

(C) COLOR

☒ (P) PANCHROMATIC

(I) INFRARED

ZONE

Alaska

☒ STANDARD

MERIDIAN

150th

☐ DAYLIGHT

	NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
*	60W1326-1330	8/30/60	09:55	1:30,000	22.4 ft. above MLLW
**	66L6678-6680	8/14/66	08:42	1:40,000	2.6 ft. above MLLW

REMARKS There is no record of the photographs used to compile Point Campbell on the east of the map. This area is covered and superseded by project CM-7310 at 1:10,000 scale.

2. SOURCE OF MEAN HIGH-WATER LINE:

*The mean high water line was compiled from the above listed compilation photography.

3. SOURCE OF MEAN LOWER LOW-WATER LINE:

**None compiled for Fire Island and Point Campbell. The M.L.L.W.L. for the north shoreline is from 1966 photographs.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12002	CM-7310 1:10,000 scale T-12015 & T-12017	No Survey	T-12013

REMARKS

Junction could not be affected with T-12017 due to the nature of the area and a later date of photography for T-12017.

T-12014

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	A. Wardwell	Apr - Jul 1961
2. HORIZONTAL CONTROL	RECOVERED BY R. Williams	Apr - Jul 1961
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED None		2. VERTICAL CONTROL IDENTIFIED NA	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
3. PHOTO NUMBERS (Clarification of details) None			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED None			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE		6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE	
7. SUPPLEMENTAL MAPS AND PLANS None			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) None			

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12014

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	K. W. Jeffers	May/Aug. 74
2. HORIZONTAL CONTROL	RECOVERED BY None ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY N.A. PRE-MARKED OR IDENTIFIED BY N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY G. Stroble LOCATED (Field Methods) BY G. Stroble IDENTIFIED BY None	Jul. 1974 Jul. 1974
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY G. Stroble	Jul. 1974
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

N.A.

PHOTO NUMBER

STATION NAME

PHOTO NUMBER

STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

60W-1328

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

5. GEOGRAPHIC NAMES:

☐ REPORT☒ NONE

6. BOUNDARY AND LIMITS:

☐ REPORT☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Field Edit Ozalid
1 Field Edit Report
1 Form 76-40

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12014
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	2/63	Class III manuscript	None	Unknown
Partial 1974 Field Edit applied.	8/75	Class III manuscript	None	For additional edit 5/76
Four aids applied from 1974 edit.	2/77	Class III manuscript Requested additional field edit-not returned.	2/1/78	2/1/78
Final Review	5/86	Final Map		

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		2/6/78	4 Aids for charts

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: February 6, 19783. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
 4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

REVISED 8-24-76 RWM
REVISED 3-11-77 RS.

FILED
JAN 19 1960

12018
12019
12020
12021

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12030
12031

254222

12038
12039
12040 (2)
12041
12042
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12044
12045 (2)
12046 (2)
12047
12048
~~12049~~
12507
12508

[illegible]

TOTAL

150

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12014

This 1:20,000 scale Class III Final (Partial Field Edit) shoreline map is one of 44 maps designated as Project PH-6013 Cook Inlet, Kalgin Island to Anchorage, Alaska.

The purpose of this map was to provide contemporary shoreline in support of hydrographic operations and to aid in chart revision.

A history of the field recovery and premarking of the control or the bridging of the control is not available for the 1960 photography.

Field work prior to compilation in the 1961 field season consisted of recovery of horizontal control and limited field inspection. Field work in 1966 consisted of premarking of horizontal control for aerotriangulation.

The Fire Island area was photographed in August 1960 with the RC-5 "W" camera using panchromatic film. The Cook Inlet north shore area was photographed August 1966 with the RC-8 "L" camera using panchromatic film.

Aerotriangulation was performed in the Washington office in April 1967.

The Fire Island area was compiled at the Portland office in February 1963. The Cook Inlet north shore area was compiled in the Norfolk office April 1967.

Partial field edit was performed for T-12014 in August 1963 and July 1974. Field edit data was applied at AMC in August 1975. The southeast side of Fire Island has not been field edited.

Final review was performed at the Atlantic Marine Center in March 1986.

This Descriptive Report contains all pertinent information used to compile this Class III Final Map. The original base manuscript and all related data were forwarded to the Washington Science Center for final registration.

7

FIELD INSPECTION REPORT

COOK INLET, ALASKA

PROJECT SP-1-61 1961

USC&GS Ship PATHFINDER

Arthur L. Wardwell, CAPT., Comdg.

MANUSCRIPTS:-

12049, 12046, 12045, 12040, 12031, 12032, 12026, 12027, 12028, 12020, 12021, 12022, 12017, 12015, 12016, 12014, 12013, 12008, 12007, 12006, 12003, 12004, 12005, 12002, 12001, 12000, 12012, 11999, 12011, 11998, 12010, 12009, 12019, 12018, 12023, 12025, 12024, 12029, 12030, 12035, 12034, 12033, 12037, 12036

AERIAL FIELD INSPECTION:-

Areas inspected were as follows: Manuscripts No. 12049, 12046, 12045, 12040, Kenai to Boulder Point, all shoreline and alongshore features.

Balance of above listed manuscripts were used only for horizontal control identification.

The area is primarily moderately timbered with spruce, fir, alder and bear claw above the mean high water line. Shoreline varies from fine black silt at the mouth of the Kenai River mouth to large fragmented boulders at Boulder Point. Most of the beachline is sand and shingle interspersed with boulders of varying sizes. Numerous underground springs and some small creeks discharge small quantities of silt and water and are subject to constant change.

The area was inspected by cruising alongshore by launch and by walking the beach and bluff line. Foul areas now indicated on Chart No. 8553 are adequate. Two primary foul areas were noted as follows:

Kenai River Mouth

East Foreland to Moose Point

Quality of photographs was excellent. Areas of shadow were limited to the shoreline east of East Foreland and upper Knik Arm. No attempt was made to sketch in the mean high water line. Enough open areas in shadowed areas are available to adequately delineate mean high water line.

HORIZONTAL CONTROL:-

Four additional second-order triangulation stations were established between Kenai and East Foreland to supplement existing control in the area of hydrography. They were identified as follows:

AUDRY 1961	Manuscript No. 12049	Photo No. 1397
LOUISE 1961	" " 12049	" " 1402
BOO 1961	" " 12045	" " 1420
HELEN 1961	Traverse from East Foreland Light 1960.	

- (2) -

Additional horizontal control recovery was made in upper Cook Inlet in accordance with project instructions. All stations were searched for and approximately 75 percent were recovered. Most of the stations not recovered are considered lost. It is recommended that the next vessel assigned to this project be given a Tellurometer. Simple traverse between recovered triangulation stations would adequately control presently un-controlled flight lines.

In many cases the listed triangulation station was not recovered and a U.S. Engineers' triangulation station was used as a substitute. It appears that the U.S. Engineers could not recover listed C&GS control and substituted their own stations.

Great assistance was rendered by the 5040 Air Transport Squadron at Elmendorf AFB in furnishing helicopter service. Three days of flying enabled personnel to cover shoreline control stations over the greater part of upper Cook Inlet.

If additional control is required in the vicinity of Elmendorf AFB, use can be made of triangulation now being observed by a C&GS geodetic party. Triangulation station DORF 1961 (in the vicinity of LOOP 2) is to be set in the roof of a building on the base. By use of the description written by the observing party, an accurate office identification can be made.

Triangulation not plotted on the Photo Index was identified where it was on photographs. This control was established by G.W.M. in 1959 and H.G.C. in 1960.

VERTICAL CONTROL:-

None recovered or established.

CONTOURS AND DRAINAGE:-

No contouring was attempted.

Primary drainage features are the Kenai, Matanuska, Little Susitna, Susitna, Beluga, Kustitan, and Drift Rivers. Tidal sweep keeps some of the rivers from building up deltaic features. An extremely flat foreshore on the Matanuska, Little Susitna, Susitna and Beluga rivers give rise to wide deltas that change seasonally. Many small streams discharge around Cook Inlet but have no apparent seasonal change.

WOODLAND COVER:-

The major portion of the area is wooded and interspersed with muskeg and open grassy areas. These are easily identifiable on the photographs. In areas of increasing cultural activity, the woodland cover is being removed. No attempt was made to indicate these areas.

SHORELINE AND ALONGSHORE FEATURES:-

The mean high water line is adequately delineated on manuscripts 12049, 12046, 12045, 12040. In the area of photo hydro signals IVY and EGG, east of East Foreland, the mean high water line is as follows:

IVY 30 meters inside MHW

EGG on piles at MHW

-(3)-

Most of the shoreline signals are located at MHW along the beach. Many of the fishing huts set on piles at the base of the bluff were used as signals.

No attempt was made to delineate the low water line. Hydrography in the area should be satisfactory.

The foreshore area is primarily sand, small stones and boulders. The normal gradation from stones at MHW to sand at MLW exists in all areas, except south of the Kenai River. In this area a heavy layer of silt is found in the tide zone.

OFFSHORE FEATURES:-

All offshore features are located by the hydrographer.

LANDMARKS AND AIDS:-

There are two fixed aids to navigation within the limits of the hydrographic project:

EAST FORELAND LIGHT

KENAI RIVER ENTRANCE RANGE

Both are located on Chart No. 8553.

One floating aid is also located on Chart No. 8553. Another can buoy is maintained by the oil company and is located just north of the pier.

One landmark for charts is recommended in the Descriptive Report for SP-1-61. This landmark is identified as follows:

KENAI TANK 1959, located by G.W.M. and identified on Photo No. 60W1400.

BOUNDARIES, MONUMENTS AND LINES:-

None shown.

OTHER CONTROL:-

Photo hydro signals were located in accordance with standard instructions. Signal IVY was found in error and relocated photogrammetrically, then verified by hydrographic cuts. Final location is shown on manuscript 12045.

Final location of photo hydro signals will remain in their relative position with the shoreline. Final compilation will cause a datum shift which will move both hydrography and signals the same relative amount.

DATUM DIFFERENCES:-

Radial plotting of photo identified control stations was made in the field. The following discrepancies were noted between plot positions and geographic positions.

EAST FORELAND LIGHT 1960	Lat. -13.8 meters
	Long. -75.4 meters
BOULDER (USE)	Lat. -37.0 meters
	Long. -45.2 meters
KENAI CHURCH STEEPLE 1909	Lat. -15.3 meters
	Long. -23.6 meters

-(4)-

CULTURAL FEATURES:-

Numerous fishing shacks are located along high water line in the area of hydrography. These huts are subject to damage by winter storms and are in a constant state of transition. No attempt was made to locate current huts.

The Nikiski Oil Pier was under construction at the time of photography. The completed dimensions are available from a blueprint of the structure submitted with descriptive report for Project SP-1-61.

Respectfully submitted,

Robert E. Williams,
Lieut. Comdr., C&GS

Gerald C. Saladin
Gerald C. Saladin
LTJG, C&GS

Arthur L. Wardwell
Arthur L. Wardwell,
Captain, C&GS
Comdg., Ship PATHFINDER

PHOTOGRAMMETRIC PLOT REPORT

Job PH-6013
Cook Inlet, Alaska

April 13, 1967

21. Area Covered

The area covered by this report extends from the Redoubt Bay-East Foreland area to Anchorage, Alaska. Included in this area are T-sheets 11998 thru 12001, 12009 thru 12012, 12018, 12019; 12021, 12025 thru 12030, 12038, 12039, 12042 thru 12044, 12047, 12048 and 12987.

22. Method

Five strips were bridged on the C-8 and C-5 stereoplanigraph. Strip #1 (66-L-6602 thru 6623) was adjusted on four triangulation stations with tie points used as checks. Strip #2 (66-L-6629 thru 6634) was adjusted on two triangulation stations plus tie points from Strip #1. Strip #3 (66-L-6641 thru 6653) was adjusted on three triangulation stations plus ties. Strip #4 (66-L-6667 thru 6677) was adjusted on three triangulation stations plus ties. Strip #9 (66-L-6713 thru 6725) was adjusted on three triangulation stations.

23. Adequacy of Control

The control, being premarked, was very good insofar as being able to see it clearly; however, in several cases, the 1:40,000 scale photography completely missed the stations. It should be noted that all strips were adjusted with minimum control, and as such, no positive proof can be provided that the adjustments are correct other than by means of tie points and residuals of adjustment. The tie points and residuals do indicate a good adjustment on all strips. Strip #4 had to be terminated at station SIT 1966 due to lack of control beyond this point. (Port McKenzie could not be seen on the 1:40,000 scale photography.) Attempts were made to provide a tie point for the terminal station on the east end of this strip by bridging three models south of Anchorage, dropping points onto Strip #4. This met with complete failure. Strip #6 had to be terminated on the southern end at station GRAY CLIFF 1909 since the station at East Foreland was not covered by the 1:40,000 scale photography.

24. Supplemental Data

Local USGS quads were used to provide vertical control used in the bridging adjustment.

The coverage of 1966 photography falls short of being sufficient to show the shallow mud areas which are near lower-low water level in the area of the Susitna River Delta. To provide for the delineation of the limiting line of this feature, scale points have been selected which are common to 61M photography which does show the limiting line. Ratios of these photographs will be provided for the graphic delineation of the limiting line only. The compiler should select whatever additional points are necessary for correct delineation. A holiday exists on some of the shoreline along Strip #9. A flight of 60W photography provides coverage and three ratio photos were provided for compilation of this area.

All points on the bridged plates were drilled by PUG methods. Plate 66-L-6719 was broken after bridging. A new plate was provided but it does not contain any drilled points. It is suggested that the models on either side be compiled and pass points be dropped on this plate for compilation.

25. Photography

Photography was adequate as to definition and overlap but was not adequate as to coverage. The 1:40,000 scale photos did not cover either the shoreline or the marked control on the east end of Strip #4 or the southwest end of Strip #9. A portion of the shoreline along the part of Strip #9 which was bridged also lacks coverage.

Submitted by:

Paul Hawkins
by JHP

Paul Hawkins

Approved by:

John D. Perrow, Jr.
John D. Perrow, Jr.

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	PH-6013	GEODETIC DATUM		ORIGINATING ACTIVITY	GEOGRAPHIC POSITION		REMARKS		
				NA	1927		ϕ LATITUDE	λ LONGITUDE			
				COORDINATES IN FEET							
				STATE	ZONE						
				AEROTRI- ANGULATION POINT NUMBER							
				SOURCE OF INFORMATION (Index)							
T-12014	RACE POINT, 1909	PH-6013	Quad. 61150 P. 3		X=	Y=	ϕ 61 10 05.146	159.3	(1697.9)	Division, AMC, Norfolk, VA	BACK
							λ 150. 13 22.267	332.9	(564.1)		
	RACE POINT LIGHT, 1941		Quad. 61150 P. 3		X=	Y=	ϕ 61 10 17.503	541.8	(1315.4)		
							λ 150 12 35.050	524.0	(373.0)		
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COMPILATION REPORT
INCOMPLETE MANUSCRIPT T-12014
PROJECT PH-6013

31 THROUGH 36:

REFER TO PARAGRAPHS 31 THRU 36 OF THE COMPILATION REPORT FOR T-12013.

37. LANDMARKS AND AIDS:

FORMS 567 WERE SUBMITTED FOR ONE FIXED AID TO NAVIGATION.

38. CONTROL FOR FUTURE SURVEYS:

SEVEN ELEVATED STRUCTURES WERE SELECTED FOR POSSIBLE USE DURING HYDROGRAPHIC SURVEYS.

39. JUNCTIONS:

A SATISFACTORY JUNCTION WAS MADE TO THE WEST WITH MANUSCRIPT T-12013. OTHER JUNCTIONS WILL BE MADE WHEN ADJOINING MANUSCRIPTS ARE COMPILED.


40. HORIZONTAL AND VERTICAL ACCURACY:

THERE ARE NO AREAS ON THIS MANUSCRIPT BELIEVED TO BE OF SUB-NORMAL HORIZONTAL ACCURACY. VERTICAL ACCURACY IS NOT APPLICABLE.

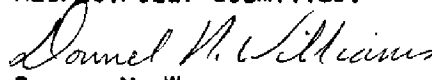
46 AND 47:

REFER TO PARAGRAPHS 46 AND 47 OF THE COMPILATION REPORT FOR T-12013.

APPROVED:


FRED NATELLA, CAPT, C&GS
PORTLAND DISTRICT OFFICER

RESPECTFULLY SUBMITTED:


DONNEL N. WILLIAMS
CARTOGRAPHER

ADDENDUM TO COMPILATION REPORT

T-12014

On August 8, 1975, this manuscript was revised from July 1974 partial field edit. The original manuscript was compiled during February 1963 from 1960 photography field inspected during 1961. During June 1963, the area was field edited and was only partially applied.

The balance of the 1963 field edit was applied with the July 1974 field edit, and although the area has now been edited on two occasions, it is not yet a Class I manuscript.

Inasmuch as the 1974 field editor recommended specified areas as requiring further edit, the manuscript remains Class III.

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6013 (Cook Inlet)

T-12014

Cook Inlet

Fire Island

Fire Island Moose Reservation

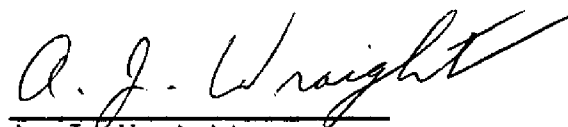
Knik Arm

North Point

Race Point

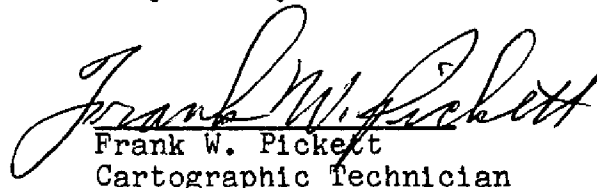
Shelter Bay

Approved by:



A. J. Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

FIELD EDIT REPORT

OPR-469-RA-1974

UPPER COOK INLET, KNIK ARM

ALASKA

T-12000 thru T-12008

T-12012 thru T-12016

T-12021

T-12031

TP- 00515

NOAA Ship RAINIER

CDR K. William Jeffers

Commanding

INTRODUCTION

Field edit was completed on selected "minus tide days" during the period from mid-May through the end of August. Work was carried out on shore and land.

Field edit was started in the Port of Anchorage and continued north up Knik Arm to Latitude $61^{\circ}22.0'$, the northern limit of shoreline control. Field edit was completed on the north side of Cook Inlet westward to Longitude $150^{\circ}37.0'$. Shoreline around Fire Island was inspected on the northwest side from North Point to West Point. Approximately 3 miles of shoreline were inspected in the immediately vicinity of Pt. Possession.

Photographs used in the field edit are from jobs CM-7310 and PH-6013. Height data on all rocks was estimated. Times were referenced to 0° Longitude.

Adequacy of Compilation

All rocks and offshore features are labeled on the field edit ozalids, and wherever possible, verified on the field photos. Compilation of the MHWL was excellent on the manuscripts. Verification of MLLW was done by launch hydrography and is clearly delineated on the boat-sheets.

Shoreline Summaries

T-12000, T-12001, T-12002, T-12012, T-12013 (Northern Half), T-12014 (Northern Half)

This group of manuscripts includes the northern part of Cook Inlet from Susitna River to Pt. Mackenzie. The area is one of extensive mud flats. One discrepancy was noted on the shoreline junction between T-12002 (1966 shoreline manuscript) and T-12006 (1973 shoreline manuscript). The 1973 shoreline manuscript extended the shoreline up to the forest edge. The MHWL is along a marsh that extends south from the forest edge. Therefore the shoreline was adjusted to follow the MHWL along the marsh.

T-12013 and T-12014 (southern Half)

The shoreline in this area covers Fire Island. The shoreline of Shelter Bay is muddy. The northern side of the island has a rocky beach with some detached rocks, none extending more than a quarter mile off shore. The southern and eastern side of Fire Island was not field edited, therefore, the Field Edit Ozalids should be returned to the RAINIER as soon as possible.

T-12021 and T-12031

The vicinity of Point Possession is foul with offshore rocks. The west side of Pt. Possession is very foul with rocks extending out 3/4 mile. This area was not completely field edited, therefore, the manuscripts and field edit ozalids should be returned to the RAINIER as soon as possible.

T-12006, T-12015, T-12016, TP-00515

This area includes Anchorage Harbor and the area extending westward to Pt. Mackenzie and Pt. Woronzof. The southern shore is primarily mud flats, almost entirely free of offshore rocks. The northern shore has many offshore rocks awash at MLLW. TP-00515 is a 1:5,000 scale inset of Anchorage Proper. Pier heights and additional data were recorded on the Field Edit Ozalid.

T-12007, T-12008

Lower Knik Arm-- The east and west shore are foul with many rocks and boulders awash at MLLW.

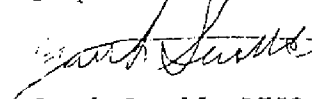
T-12003, T-12004, T-12005

This area includes upper Knik Arm to the extent of the 1973 photo coverage. The east and west shores are mud with very few dangerous rocks.

Recommendations

Much of the area included in this survey project lacked good photo support. The 1973 photo support in Knik Arm and Anchorage Harbor was excellent, however, the 1966-1967 coverage westward into Cook Inlet was very sparse. Of special concern is the fact that the T-sheet and flight-line index showed many flight lines of photos which were never received and would have aided our field operations considerably. If these flights lines or even parts of them are not available, a complete inventory should be supplied for our records.

respectfully submitted,


(Garth Stroble LTJG, NOAA

PH-6013
T-12013
T-12010

AIDS TO NAVIGATION AND
LANDMARKS FOR CHARTING

NOAA SHIP RAINIER

OPR-469-RA-1974

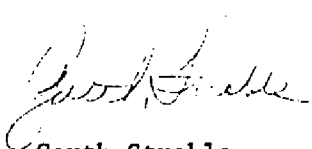
21 October, 1974

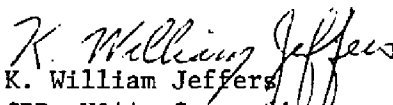
K. William Jeffers
Commanding

According to section 7-18 of the Hydrographic Manual, Publication 20-2, Aids to Navigation and Landmarks for Charting shall be submitted as a special report. Since all the the information in this report is directly related to field edit operation, I feel this report could be incorporated in the Field Edit Report.

The chart letters and NOAA forms 76-40 included are self-explanatory and need no further explanation. The forms and letters were prepared as per sections 7.6 and 8, respectively, of the Coast Pilot Manual, Edition 3, 1969.

For further information on the locations of Aids to Navigation, refer to Geodetic Control Report, OPR-469-RA-1974.


Garth Stroble
LTJG, NOAA


K. William Jeffers
CDR, NOAA, Commanding

REVIEW REPORT
T-12014

SHORELINE

61 - GENERAL STATEMENT

See Summary included with this Descriptive Report.

62 - COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Not applicable.

63 - COMPARISON WITH MAPS OF OTHER AGENCIES

Not applicable.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with the following Hydrographic Surveys:
H-9442, 1:10,000 scale, dated December 19, 1977,
H-9444, 1:20,000 scale, dated April 10, 1978.

There were no major conflicts.

The contemporary Hydrographic Survey for the area southeast of Fire Island was not available for comparison at the time of Final Review.

65 - COMPARISON WITH NAUTICAL CHARTS

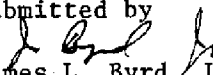
A comparison was made with the following NOS Charts:
16664, scale 1:40,000, 18th edition, dated January 16, 1982
16660, scale 1:194,154, 22nd edition, dated May 8, 1982.

The listed charts compared well with this manuscript.

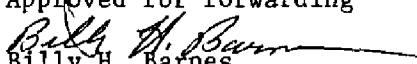
66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by



James L. Byrd, Jr.

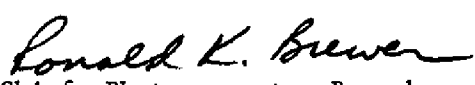
Approved for forwarding


Billy H. Barnes

Chief, Photogrammetric Section, AMC

Approved


Chief, Photogrammetric Production Sec.


Chief, Photogrammetry Branch

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION		<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
OBJECTS INSPECTED FROM SEAWARD	Garth Strobble	FIELD ACTIVITY REPRESENTATIVE
POSITIONS DETERMINED AND/OR VERIFIED	Garth Strobble	OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	Frank Margiotta	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.)

FIELD (Cont'd)	
<p>OFFICE</p> <p>I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75</p> <p>FIELD</p> <p>I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant</p> <p>A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75</p> <p>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</p>	<p>B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982</p> <p>II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75</p> <p>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75</p> <p>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</p>

